CLAIMS

19. (ORIGINAL) A method for compensating for the Doppler effect in a communication system where messages are transmitted at a low data rate to a user terminal that is inside a building, comprising the steps of:

acquiring a pilot signal prior to the user terminal entering the building;

placing the user terminal into a deep paging mode prior to the user terminal entering the building;

tracking Doppler as the user terminal proceeds into the building; and

monitoring an auxiliary paging channel after activating said deep paging mode.

20. (ORIGINAL) The method of claim 19, wherein paging channel messages transmitted over said auxiliary paging channel are combined with a Walsh sequence having a length greater than or equal to 128 chips.

21. (ORIGINAL) The method of claim 19, further comprising the step of acquiring an auxiliary synchronization signal.

22. (ORIGINAL) The method of claim 19, further comprising the step of acquiring an auxiliary pilot signal.

23. (ORIGINAL) The method of claim 22, wherein paging channel messages transmitted over said auxiliary paging channel are transmitted at a data rate of less than 4800 bits per second.

24. (ORIGINAL) A method for compensating for the Doppler effect in a communication system where messages are transmitted at a low data rate to a user terminal that is inside a building, comprising the steps of:

receiving at the user terminal ephemeris messages transmitted from a gateway;

storing in the user terminal said ephemeris messages;

determining the location of the user terminal;

determining Doppler based on said location and said ephemeris messages stored in the user terminal; and

acquiring a pilot signal.

25. (ORIGINAL) The method of claim 24, wherein said step of determining the location of the user terminal includes the step of storing the location of the user terminal each time the user terminal registers with a gateway.

26. (ORIGINAL) The method of claim 24, wherein said step of determining the location of the user terminal includes the step of receiving a global positioning system (GPS) signal.